First NSF-Italy Workshop on Frontiers in Materials Research, Nanoscale Science and Nanotechnology

Frank J. Di Salvo (Cornell U.) and Aron Pinczuk (Columbia U.) **DMR-0213576**

A Workshop Held on March 14-15, 2002 –at NSF, Arlington, VA, USA

Goals: to debate current and future areas for collaborative research, education and training between US and Italian scientists engaged in studies at frontiers of Materials Science, Nanoscale Sciences and Nanotechnologies, to enhance and expand bilateral collaborations.

Sponsors: NSF (US), CNR (It), INFM (It), INSTM (It), and the Italian Ministry of Foreign Affairs.

Organizers: Frank J. Di Salvo (Cornell U.), Elisa Molinari (INFM, U. Modena), Aron Pinczuk (Columbia U., Lucent), Carlo Taliani (ISM-CNR, Bologna), Giorgio Mattiello (Italian Embassy, Washington, DC)

Participants: 61scientists with a large representation of the chemistry, engineering and physics communities active in nanoscale sciences. The meeting was also attended by representatives of funding agencies from the United States and from Italy.

Topics: Electrons in Low-dimensional Systems, Nanoelectronics and Spintronics, Nanoscale Optics and Optoelectronics, Nanoscale Fabrication and Self-assembly, Biomolecular Materials and Devices.

Workshop Conclusions and Recommendations

The report of the Workshop addresses the multitude of the topics and issues considered. Participants emphasized that several important ongoing collaborations between individual researchers and groups from both countries exist. There was a general consensus –expressed by scientists as well as representatives of the US and Italian agencies– on the fact that the relations between US and Italy in this field are extremely advanced in comparison to other bilateral efforts.

The participants are convinced that effective collaborations could be extended to many other areas of active and frontier research in materials science, nanoscale science and nanotechnology, with significant benefits for both countries.

The Workshop participants agreed on the importance of having as strategic goal to go beyond the existing modes of collaboration by devising new bilateral mechanisms to support common research projects.

The complete report on the Workshop is available at the web site of the Nanoscale Science and Engineering Center at Columbia University:

http://www.cise.columbia.edu:16080/nsec/downloads